

IEPA Log No.: **C-0004-16**  
CoE appl. #: **LRC-2015-00825**

Public Notice Beginning Date: **November 9, 2016**  
Public Notice Ending Date: **November 30, 2016**

Section 401 of the Federal Water Pollution Control Act  
Amendments of 1972

**Section 401 Water Quality Certification to Discharge into Waters of the State**

**Public Notice/Fact Sheet Issued By:**

Illinois Environmental Protection Agency  
Bureau of Water  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-3362

**Name and Address of Discharger:** City of Lake Forest – 800 N. Field Drive, Lake Forest, IL 60045

**Discharge Location:** Near Lake Forest in NE 1/4 of Section 28 of Township 44N, Range 12E of the 3rd P.M. in Lake County.

**Name of Receiving Water:** Unnamed tributary to Lake Michigan

**Project Description:** Proposed restoration of ravine within Lake Forest Cemetery.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Darren Gove at 217/782-3362.

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A ravine tributary to Lake Michigan located in the Lake Forest Cemetery is in need of restoration. The ravine is divided by a culvert and land bridge into East and West segments. Both segments suffer from degradation due to down-cutting erosion caused by stormwater coming into the ravine from nearby residential lots. Two small diameter storm sewers from the 19 acre watershed of the West ravine bring in storm runoff that is eroding the bed of the ravine, causing dewatering of the ravine and contributing to sediment loading to Lake Michigan. The restoration plan involves the laying of a storm sewer line at the bottom of the ravine and filling with clay and gravel to what has been determined to be the original height. Stormwater from the residential area coming from the existing storm sewers (but not stormwater from elsewhere in the watershed) would then flow under the ravine rather than continue to down cut. Vegetation would be allowed to naturally take root at the ravine bottom. Future plans call for invasive species control and planting native species.

The East ravine would continue to receive the same volume of stormwater that it does now, but down-cutting would be diminished by breaking up the existing concrete floor of the ravine and supplementing the broken concrete with stone cobble. Water is currently eroding underneath the concrete. The East ravine would be better able to handle stormwater flows without erosion under the restoration plan. Like the West ravine, the East would be equipped to have vegetation grow on the floor of the ravine, taking root in-between the broken concrete and cobble.

Information used in this review was obtained from the Applicant's consultant Conservation Design Forum in a document entitled Individual 401 Water Quality Certification for Joint Permit Application for Ravine Restoration at the Lake Forest Cemetery in Lake Forest, Illinois dated February 1, 2016 and in subsequent submittals.

### **Identification and Characterization of the Affected Water Body.**

According to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List, the ravine (no segment code) has not been assessed by Illinois EPA. This stream segment is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System* nor is it given an integrity rating in that document. The stream segment is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard.

A wetland survey was conducted and it was determined that no wetlands exist in the ravine system. The ravine system has a very intermittent water flow due to the extremely small watershed area and past down-cutting. A biological characterization was not required given that aquatic life would be of very limited scope in the ravine in its current condition. Restoration plans will create habitat more favorable to a larger variety of aquatic life.

### **Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.**

The pollutant load increases that would occur from this project include some possible increases in total suspended solids during construction. After construction, solids loading to Lake Michigan from the ravine system will decrease due to the fact that down-cutting of the ravine floors will be greatly reduced. Nutrients in the ravine soil that are currently migrating to the Lake will be retained and therefore nutrient loading to the Lake will also decrease. The habitat at the bottom of the ravine that may support aquatic life will be initially disturbed, but after restoration the ravine segments will have better aquatic life habitat that is not subject to destructive flash increases in flow during storm events.

### **Fate and Effect of Parameters Proposed for Increased Loading.**

The increase in suspended solids will be local and temporary. Aquatic life disturbed by the restoration process will return to populate the ravine, potentially in higher numbers and variety.

### **Purpose and Social & Economic Benefits of the Proposed Activity.**

The ravine habitat will benefit from the restoration and soil loss will be reduced. The local community will enjoy a more natural ravine system.

### **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

Different scenarios for accomplishing erosion control in the ravines were explored. Lining the ravines with concrete would have stopped the down-cutting, but would result in an unnatural habitat. The chosen design for restoration couples the need to stop the down-cutting with the return of natural, vegetated ravine floors.

### **Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities**

An endangered species consultation was terminated by the Illinois Department of Natural Resources in an August 15, 2016 letter. IDNR concluded that harm to any endangered species in the area from this project would be unlikely.

### **Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by restoring a more natural habitat quality to a ravine system. Comments received during the 401 Water Quality

Certification public notice period will be evaluated before a final decision is made by the Agency.